

Customer No.: 31561

Application No.: 10/708,353

Docket NO.: 10785-US-PA

In The Claims:

Claim 1. (currently amended) A microstrip line parallel-coupled-resonator coupled line filter with open-and-short end, comprising:

an input port, used to receive an input signal;

a first resonator, wherein the first resonator is a bent resonator and is coupled to the input port;

a second resonator, wherein the second resonator is a resonator whose both ends are shorted to ground, and coupled to the first resonator;

a third resonator, wherein the third resonator is a bent resonator, and is coupled to the second resonator and cross coupling exists exits with to the first resonator through a gap between the first resonator and the third resonator, wherein the gap is used to design lower stop-band transmission zero; and

an output terminal, coupled to the third resonator to output signal.

Claim 2. (currently amended) The microstrip line parallel-coupled-resonator coupled line filter with open-and-short end of claim 1, wherein a portion of the input port and a portion of the output port are facing in a same direction, resulting in a weak cross coupling, wherein the distance between the portion of the input port and the portion of the output port is used to design upper stop-band transmission zero.

Claim 3. (currently amended) The microstrip line parallel-coupled-resonator coupled line filter with open-and-short end of claim 1, wherein the input port, the first resonator, the second resonator, the third resonator, and the output port are manufactured on a substrate.

Claim 4. (currently amended) The microstrip line parallel-coupled-resonator coupled line filter with open-and-short end of claim 3, wherein the dielectric constant of the substrate is 3.38, and the thickness of the substrate is 20 mils.

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Claim 5. (canceled)

Claim 6. (currently amended) The microstrip line parallel-coupled-resonator coupled line filter with open-and-short end of claim 3, wherein the length of the first resonator and the third resonator is 612 mils, the length of the second resonator is 636 mils, and the couple distance between the resonators is 4 mils.

Claims 7-10. (canceled)

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In The Title:

Please amend title as follows:

-- MICROSTRIP LINE PARALLEL-COUPLED-RESONATOR FILTER WITH
OPEN-AND-SHORT END --